CLAIMS

What is claimed is:

5   1.   A remote viewing system, comprising:

a serving station configured to receive image data, the serving station comprising:

a scanner module configured to modify a scanning rate of the image data; and

10   an encoder module configured to modify an encoding format of the image data;

a served station configured to receive modified image data from the serving station via a network; and

a plurality of network sensors in communication with the serving station and

15   configured to provide network performance data to the serving station, wherein the serving station dynamically modifies at least one of the scanning rate and the encoding format based on the network performance data.

2.   The remote viewing system of claim 1, wherein the serving station

20   comprises a monitor for presenting image data to an operator.

3.   The remote viewing system of claim 2, wherein the serving station is configured to present an indication associated with the network performance data to the operator.

25

4.   The remote viewing system of claim 3, wherein the indication comprises a bar chart.

5.   The remote viewing system of claim 3, wherein the indication

30   comprises a network indicator that relates to the network performance data.

6.   The remote viewing system of claim 1, wherein the serving station is in communication with an imaging system configured to detect a plurality of signals that are convertible into an image, the imaging system configured to produce the image data.

5

7.   The remote viewing system of claim 1, wherein the plurality of network sensors exchange a plurality of packets to determine network congestion.

8.   The remote viewing system of claim 1, wherein the plurality of network

10   sensors exchange a plurality of packets to determine network latency.

9.   The remote viewing system of claim 1, wherein the network comprises a wide area network.

15   10.   The remote viewing system of claim 1, wherein the network comprises an Internet.

11.   The remote viewing system of claim 1, wherein the serving station receives image data from a medical imaging system.

20

12.   The remote viewing system of claim 1, wherein the serving station utilizes a remote framebuffer protocol to transmit the modified image data to the served station.

25   13.   The remote viewing system of claim 1, wherein the served station transmits remote input data to the serving station.

14.   The remote viewing system of claim 1, wherein the serving station receives local input data from a local operator via an input device that is coupled to the

30   serving station.

15.   A method for adapting screen updates based on network congestion, the method comprising:

measuring network performance between a serving station and a served station, wherein the serving station provides screen data derived from an imaging system to the served station; and

adjusting the screen data transmitted to the served station automatically based on the measurement of the network performance.

16.   The method of claim 15, wherein measuring network performance comprises transmitting a test packet from the serving station and receiving a response packet from the served station.

17.   The method of claim 15, comprising converting image data from the imaging system into screen data.

18.   The method of claim 15, wherein the imaging system comprises one of a c omputed t omography imaging system, an magnetic resonance imaging system, a tomosynthesis system, a positron emission tomography imaging system, and a X-ray imaging system.

19.   The method of claim 15, wherein adjusting comprises modifying a frame buffer scanning algorithm based on the network performance.

20.   The method of claim 15, comprising transmitting the screen data to the served station from the serving station.

21.   The method of claim 15, comprising encoding the screen data for transmission to the server station.

22.   The method of claim 21, wherein adjusting comprises modifying a data transmission algorithm that compresses the screen data based on the network performance.

21

23.   The method of claim 15, comprising displaying an indication of the network performance at one of the serving station and the served station based on the measurement of the network performance.

5

24.   A computer program provided on one or more tangible media for adapting screen updates based on network congestion, the computer program comprising:

a routine for measuring network performance between a serving station and a
10   served station, wherein the serving station is associated with an imaging system; and

a routine for dynamically modifying a plurality of screen updates transmitted to the served station for display based on a measurement relating to network performance.

15   25.   The computer program, as set forth in claim 24, comprising a routine for acquiring imaging data from the imaging system, wherein the plurality of screen updates are based on the imaging data.

26.   The computer program, as set forth in claim 24, comprising a routine for
20   displaying an indication of the network performance on at least one of the serving station and the served station based on the measurement of the network performance.

27.   The computer program, as set forth in claim 24, comprising a routine for determining the network latency between the serving station and the served station.

25

28.   The computer program, as set forth in claim 24, comprising a routine for encoding the screen updates based on the measurement of network performance.

29.   The computer program, as set forth in claim 24, wherein the plurality of
30   screen updates is modified by adjusting a frame buffer scanning algorithm.

30. The computer program, as set forth in claim 24, wherein the plurality of screen updates is modified by adjusting a data transmission algorithm.

31. A method for adapting screen updates based on network performance, the method comprising:

detecting network performance between a serving station and a served station;

comparing the network performance to a specified range; and

modifying a plurality of screen updates dynamically based upon the comparison of the network performance.

32. The method of claim 31, wherein the network performance corresponds to the latency of a network coupling the serving station and the served station.

33. The method of claim 31, wherein dynamically modifying the plurality of screen updates comprises adjusting a frame buffer scanning algorithm based on the network performance.

34. The method of claim 31, wherein dynamically modifying the plurality of screen updates comprises adjusting an encoding algorithm based on the network performance.

35. The method of claim 31, comprising encoding the plurality of screen updates for transmission to the served station.

36. A computer program provided on one or more tangible media for adapting screen updates based on network performance, the computer program comprising:

a routine for detecting network performance between a serving station and a served station;

a routine for comparing the network performance to a specified range; and

a routine for modifying a plurality of screen updates being transmitted to the served station from the serving station based on the measurement of the network performance.

5   37.   The computer program, as set forth in claim 36, wherein the network performance is based on a measurement of network latency.

38.   The computer program, as set forth in claim 36, wherein the plurality of screen updates are modified by adjusting a frame buffer scanning algorithm.

10

39.   The computer program, as set forth in claim 36, wherein the plurality of screen updates are modified by adjusting a data transmission algorithm.

40.   A system for adapting screen updates based on network performance,

15   the system comprising:

means for detecting network performance between a serving station and a served station;

means for comparing the network performance to a specified range; and

means for dynamically modifying a plurality of screen updates based upon the

20   comparison of the network performance to the specified range.

41.   A system for adapting screen updates based on network congestion, the system comprising:

means for measuring network performance between a serving station and a

25   served station, wherein the serving station provides screen data derived from an imaging system to the served station; and

means for automatically adjusting the screen data transmitted to the served station based on the measurement of the network performance.

30   42.   A remote viewing system for a medical imaging system, comprising:

an imaging system configured to detect a plurality of signals that are convertible into an image, the system configured to produce image data;

a serving station configured to receive the image data, the serving station comprising:

a scanner module configured to modify a scanning rate of the image data; and

an encoder module configured to modify an encoding format of the image data;

a served station configured to receive modified image data from the serving station via a network; and

a plurality of network sensors in communication with the serving station and configured to provide network performance data to the serving station, wherein the serving station dynamically modifies at least one of the scanning rate and the encoding format based on the network performance data.

43. The remote viewing system of claim 42, wherein the imaging system comprises one of a computed tomography imaging system, an magnetic resonance imaging system, a tomosynthesis system, a positron emission tomography imaging system, and a X-ray imaging system.

44. The remote viewing system of claim 42, wherein the serving station is configured to present an indication associated with the network performance data to an operator.

45. The remote viewing system of claim 42, wherein the plurality of network sensors exchange a plurality of packets to determine network performance.

46. The remote viewing system of claim 42, wherein the network comprises a wide area network.

47. The remote viewing system of claim 42, wherein the plurality of network sensors exchange a plurality of packets to determine network latency.

48.   The remote viewing system of claim 42, wherein the serving station utilizes a remote framebuffer protocol to transmit the modified image data in the served station.

5   49.   The remote viewing system of claim 42, wherein the served station transmits remote input data to the serving station.